

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Canceled)
2. (Canceled)
3. (Canceled)
4. (New) A heat sink comprising:
 - a body portion adapted to thermally couple to a semiconductor integrated circuit;
 - a mounting portion disposed on the body portion, the mounting portion adapted to removably couple with an open slot formed in a mounting member, the mounting member attachable to or part of the chassis of an electronic equipment apparatus;
 - a resilient mounting assembly removably disposed on the mounting portion; and
 - a retaining mechanism to hold the mounting member in place, the retaining mechanism removably coupled to the mounting portion.
5. (New) The heat sink of claim 4, wherein the mounting portion comprises a base member and an upper member, the base member having a greater cross-sectional surface area than the upper member, and the upper member adapted to couple with the open slot formed in the mounting member.
6. (New) The heat sink of claim 5, wherein the resilient mounting assembly comprises a washer removably mounted on the upper member, the washer further adapted to mount above the mounting member when the mounting member is coupled to the heat sink.

7. (New) The heat sink of claim 6, wherein the washer is an upwardly angled cone shaped washer.
8. (New) The heat sink of claim 6, wherein the resilient mounting assembly is further comprised of a spring positioned between the washer and the retaining mechanism, so that the spring forces the washer downwards onto the mounting member when the mounting member is coupled to the heat sink.
9. (New) The heat sink of claim 4, wherein the retaining mechanism comprises a groove formed in the upper member, and a retainer removably mounted on the upper member and adapted to couple with the groove to form a persistent connection with the upper member.
10. (New) A heat sink assembly comprising:
 - a body portion coupled to a semiconductor integrated circuit through a thermally conducting interface;
 - a mounting portion extending from a surface of said body portion said mounting portion removably coupled to an open slot of a mounting member wherein said mounting member is attachable to or part of a chassis of an electronic equipment apparatus; and
 - a resilient mounting assembly removably disposed on said mounting portion to form a retaining mechanism to hold the mounting member in place.

11. (New) The heat sink assembly of claim 10, wherein the thermally conducting interface is a thermally conductive adhesive.
12. (New) The heat sink assembly of claim 10, wherein the thermally conducting interface is a double sided thermally conductive adhesive tape.
13. (New) The heat sink assembly of claim 10, wherein the thermally conducting interface attaches the body portion to the semiconductor integrated circuit free from any hardware.
14. (New) The heat sink assembly of claim 13, wherein the semiconductor integrated circuit is mounted on a printed circuit board assembly, said printed circuit board assembly is adapted to removably couple and decouple from said mounting member.
15. (New) The heat sink assembly of claim 14, wherein the printed circuit board assembly can be inserted or removed from the electronic equipment chassis without the removal of the heat sink.
16. (New) The heat sink assembly of claim 10, wherein the mounting portion comprises a base member and an upper member with the base member having a greater cross-sectional surface area than the upper member.

17. (New) The heat sink assembly of claim 16, wherein the resilient mounting assembly comprises a washer, a retainer and a spring, said spring being disposed between the washer and the retainer.

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18. (New) The heat sink assembly of claim 17, wherein the washer is an upwardly angled cone shaped washer.

19. (New) The heat sink assembly of claim 17, wherein the resilient mounting assembly provides a bias force by the spring to the washer against the mounting member when compressed.

20. (New) The heat sink assembly of claim 17, wherein the mounting portion further comprises a groove formed in the upper member so that the retainer of the resilient mounting assembly removably coupled to the groove forming a retaining mechanism to hold the mounting member in place.

21. (New) The heat sink assembly of claim 19, wherein the spring when compressed allows the washer to move upward freely to accommodate variable mounting member thicknesses.

22. (New) A method to heat sink a semiconductor integrated circuit on a printed circuit board assembly to an electronic equipment chassis by sliding contact, comprising the steps of:

coupling a heat sink assembly thermally to a semiconductor integrated circuit on a printed circuit board assembly, wherein the heat sink assembly has an extended body with a mounting portion;

attaching a thermally conductive mounting member to an electronic equipment chassis wherein the mounting member has a slot opening extending inwardly from an edge of the mounting member;

mating the heat sink assembly to the mounting member by sliding the mounting portion to the slot opening; and

conducting the heat generated by the semiconductor integrated circuit to the electronic equipment chassis through contacting the heat sink assembly to the mounting member.

23. (New) The method of claim 22, wherein the printed circuit board assembly can be inserted or removed from the electronic equipment chassis without the removal of the heat sink assembly.